RINGKASAN

Kubis bunga merupakan salah satu sayuran yang permintaannya semakin meningkat, baik di dalam negeri maupun di luar negeri. Semakin sempitnya lahan pertanian menjadikan lahan marginal pasir pantai sebagai salah satu alternatif upaya penyediaan lahan pertanian untuk bercocok tanam, terutama komoditas hortikultura. Penerapan teknologi pengelolaan lahan pasir pantai melalui pemupukan sangat penting untuk mencapai pengkodisian tanah sebagai syarat tumbuhnya tanaman untuk berproduksi secara optimal. Salah satu jenis pupuk yang mengandung unsur hara makro dan mikro yaitu pupuk organik cair. Pemberian pupuk organik cair harus memperhatikan konsentrasi dan interval pemberiannya supaya pertumbuhan dan hasil kubis bunga maksimal. Tujuan dari penelitian yaitu untuk mengetahui: (1) pengaruh konsentrasi pupuk organik cair yang berbeda terhadap pertumbuhan dan hasil tanaman kubis bunga, (2) pengaruh interval pemberian pupuk organik cair yang berbeda terhadap pertumbuhan dan hasil tanaman kubis bunga, (3) kombinasi perlakuan konsentrasi dan interval pemberian pupuk organik cair yang terbaik bagi pertumbuhan dan hasil tanaman kubis bunga.

Penelitian dilaksanakan pada bulan Oktober sampai Desember 2018, di lahan pasir pantai Desa Banjarsari, Kecamatan Nusawungu, Kabupaten Cilacap. Penelitian menggunakan Rancangan Acak Kelompok Lengkap (RAKL) faktorial yang terdiri dari 9 kombinasi perlakuan dengan 3 ulangan. Perlakuan tersebut terdiri dari dua faktor yaitu konsentrasi pupuk organik cair dan interval pemberian pupuk organik cair. Konsentrasi pupuk organik cair yang digunakan adalah 0 ml per liter, 5 ml per liter dan 10 ml per liter. Sedangkan interval pemberian pupuk organik cair yang digunakan adalah 5 hari sekali, 10 hari sekali dan 15 hari sekali. Variabel yang diamati yaitu tinggi tanaman, jumlah daun, panjang akar, luas daun, volume akar, kadar kehijauan daun, bobot akar segar, bobot akar kering, bobot batang segar, bobot batang kering, bobot daun segar, bobot daun kering, bobot tanaman segar, bobot tanaman kering, bobot bunga segar, bobot bunga kering, umur pembentukan bunga, diameter bunga, dan hasil bunga segar.

Hasil penelitian menunjukkan bahwa pupuk organik cair konsentrasi 10 ml liter^{-1} dengan dosis 25 ml/tan meningkatkan variabel hasil dibanding perlakuan kontrol 0 ml liter^{-1} pada diameter bunga 2,71 cm atau 32,93%, bobot bunga segar 40,09 gr/tan atau 56,09%, hasil bunga segar 1,6 t/ha atau 55,94%, dan umur pembentukan bunga lebih cepat 4 hari atau 10%. Interval pemberian pupuk organik cair 5 hari sekali, 10 hari sekali, dan 15 hari sekali belum mampu meningkatkan pertumbuhan dan hasil tanaman kubis bunga. Kombinasi perlakuan konsentrasi pada berbagai interval pemberian pupuk organik cair memberikan respon yang sama pada pertumbuhan dan hasil tanaman.

Kata kunci : kubis bunga, pupuk organik cair, konsentrasi, interval.

SUMMARY

Cauliflower is one of the vegetables whose demand is increasing, both domestically and abroad. The narrowing of agricultural land makes marginal land of coastal sandy as an alternative effort to provide agricultural land for farming, especially horticultural commodities. The application of coastal sandy land management technology through fertilization is very important to achieve soil encoding as a condition for plant growth to produce optimally. One type of fertilizer that contains macro and micro nutrients is liquid organic fertilizer. Giving liquid organic fertilizer must pay attention to the concentration and interval of giving so that the growth and yield of cauliflower is maximal. The purpose of the research were to find out: (1) the effect of different concentrations of liquid organic fertilizer on the growth and yield of cauliflower, (2) the influence of different intervals of liquid organic fertilizer on the growth and yield of cauliflower, (3) a combination of concentration treatments and the interval for providing liquid organic fertilizer is best for the growth and yield of cauliflower plants.

The research was conducted in October until December 2018, at coastal sandy land of Banjarsari Village, Nusawungu Sub-district, Cilacap Regency. The research was used Randomized Complete Block Design (RCBD) factorial consisting of 9 treatment combinations with 3 replications. The treatment consisted of two factors: the concentration of liquid organic fertilizer and the interval of liquid organic fertilizer. The concentration of liquid organic fertilizer used are 0 ml per liter, 5 ml per liter and 10 ml per liter. While the interval of liquid organic fertilizer are given once every 5 days, 10 days and 15 days. Observed variables are plant height, number of leaves, root length, leaf area, root volume, greenish leaves, fresh root weight, dry root weight, fresh stem weight, dry stem weight, fresh leaf weight, dry leaf weight, fresh plant weight, dry plant weight, fresh flower weight, dry flower weight, the age of flower formation, flower diameter, and fresh flower yields.

The results showed that the liquid concentration of 10 ml liter-1 with a dose of 25 ml / tan increased the yield variable compared to the control treatment of 0 ml liter-1 at flower diameter of 2,71 cm or 32,93%, fresh flowers weight of 40,09 gr/tan or 56,09%, fresh flower yield of 1,6 t/ha or 55.94%, and the age of flower formation is 4 days or 10% faster. The interval of giving liquid organic fertilizer 5 days, once every 10 days and 15 days has not been able to increase the growth and yield of flower cabbage plants. The combination of treatment concentrations at various intervals of giving liquid organic fertilizer gives the same response to plant growth and yield.

Keywords : cauliflower, liquid organic fertilizer, concentration, interval.